

Teadit International Produktions GmbH

TF1570

sheet gasket - PTFE - EN 1514-1 - 92 x 49 x 2 mm

Maximum allowable gasket stress Q_{Smax}

T [°C]	21	150	250			
Q_{Smax} [MPa]	200	140	70			

Modulus of elasticity E_G and gasket thickness e_G

T [°C]	21		150		250				
Q_A [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]	E_G [MPa]			
1	2,001	-	2,029	-	2,003	-			
5	1,973	1139	1,978	436	1,875	219			
10	1,933	1084	1,705	379	1,281	285			
15	1,865	1099	1,350	496	0,996	433			
20	1,762	1167	1,143	760	0,841	561			
30	1,512	1432	0,890	1129	0,672	770			
40	1,349	2000	0,756	1392	0,585	926			
50	1,236	2770	0,675	1686	0,531	1071			
60	1,139	3602	0,619	1849	0,493	1185			
80	0,995	5388	0,545	1995	x	x			
100	0,891	5585	0,498	2224	x	x			
120	0,815	5058	0,463	2213	x	x			
140	0,756	4587	0,435	2280	x	x			
160	0,709	4266	x	x	x	x			
180	0,671	4006	x	x	x	x			
200	0,638	3805	x	x	x	x			
Intrusion	-		-		-				

Creep relaxation factor P_{QR} for stiffness $C = 500$ kN/mm

T [°C]	21		150		250				
Q_A [MPa]	P_{QR} [-]	Intrusion	P_{QR} [-]	Intrusion	P_{QR} [-]	Intrusion			
10	0,91	-	0,59	-	0,36	-			
20	0,84	-	0,44	-	0,24	-			
70	-	-	-	-	0,37	-			
140	-	-	0,73	-	x	-			
200	0,95	-	x	-	x	-			

Minimum required gasket stress in assembly $Q_{min(L)}$

L [mg/m/s]	10 ⁰			10 ⁻¹			10 ⁻²			10 ⁻³			10 ⁻⁴			10 ⁻⁵			10 ⁻⁶			10 ⁻⁷			
p [bar]	10	25	40	10	25	40	10	25	40	10	25	40	10	25	40	10	25	40	10	25	40	10	25	40	
Q _{min(L)} [MPa]	10	10	10	10	10	11	10	12	12	10	13	14	13	20	40	59	x	x	x	x	x	x	x	x	x

Minimum required gasket stress in service $Q_{Smin(L)}$ [MPa]

L [mg/m/s]	10^0			10^{-1}			10^{-2}			10^{-3}			10^{-4}			10^{-5}			10^{-6}			10^{-7}		
p [bar]	10	25	40	10	25	40	10	25	40	10	25	40	10	25	40	10	25	40	10	25	40	10	25	40
Q_A [MPa]	20	10	10	10	10	10	10	10	10	10	10	10	10	x	x	x	x	x	x	x	x	x	x	x
	30	10	10	10	10	10	10	10	10	10	10	10	10	28	x	x	x	x	x	x	x	x	x	x
	40	10	10	10	10	10	10	10	10	10	10	10	10	19	x	x	x	x	x	x	x	x	x	x
	60	10	10	10	10	10	10	10	10	10	10	10	10	18	35	58	x	x	x	x	x	x	x	x
	80	10	10	10	10	10	10	10	10	10	10	10	10	17	25	53	x	x	x	x	x	x	x	x
100	10	10	10	10	10	10	10	10	10	10	10	10	10	17	26	47	x	x	x	x	x	x	x	x

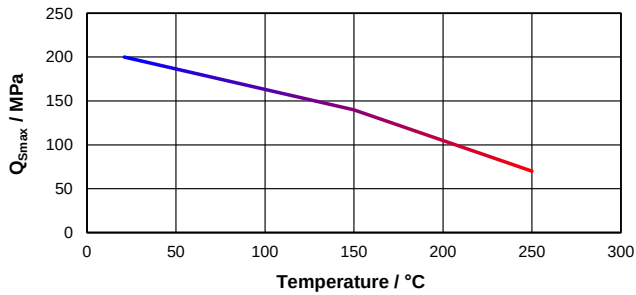
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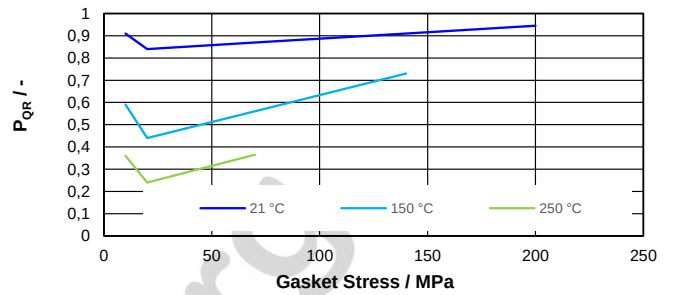
sheet gasket - PTFE - EN 1514-1 - 92 x 49 x 2 mm



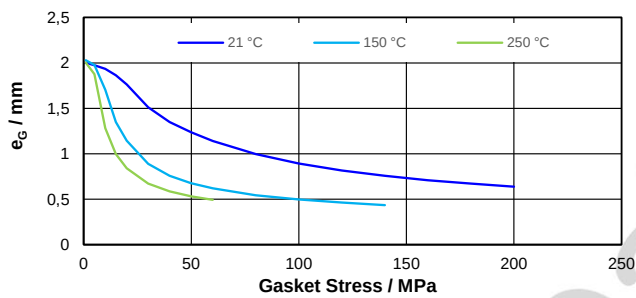
Maximum allowable Gasket Stress Q_{Smax}



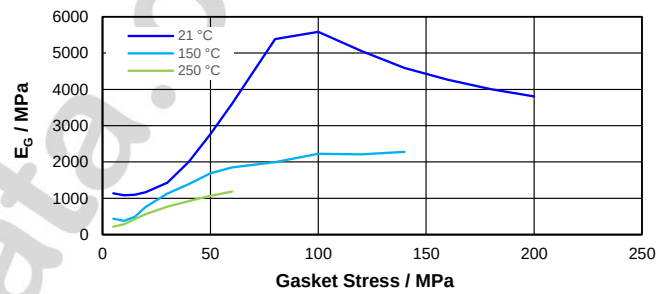
Creep Relaxation Factor P_{QR}



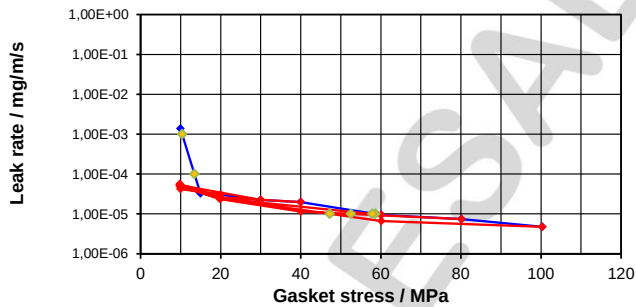
Gasket Thickness e_g



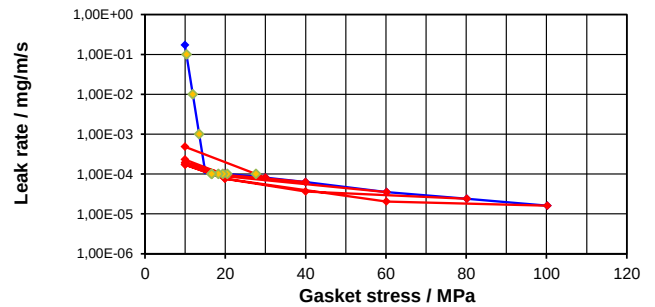
Modulus of Elasticity E_g



10 bar



25 bar



40 bar

